**UNCOAA 2019**

**Dr. Brent Larson and Dr. Matt Larson**

Head Shot Photo:

Separately attached .jpg images x 2

Presentation Title:

**Positioning for Success in a Disruptive World: The Digital 3D Transition**

Course Outline:

The rapid introduction of digital 3D technologies into the orthodontic profession has been incredibly disruptive to the industry. For those who are prepared this disruption represents a great opportunity, but for those not prepared it represents a significant threat. The goal of this course is to inform the attendees about the adoption of technology and provide insight and perspective from two stages of practice regarding how to position your practice for future success.

1. Introduction
   1. Speaker introduction and overview of different practice environments.
   2. Review the theory and evidence regarding adoption of new technologies.
2. Integrating 3D Diagnostics and Planning
   1. 3D Radiography – CBCT
      1. How to efficiently review cone beam volumes in a busy practice
      2. Examples of how 3D information can changes the treatment plan
      3. Review of dosimetry information
      4. 3D superimposition and treatment assessment
      5. Using 3D information for efficient recovery impacted canines
   2. 3D Intraoral Scanning.
      1. Use for initial records versus conventional photos
      2. “How to” walkthrough with Treatment Simulator
      3. Digital setups for treatment planning and patient communication
      4. Setups and measurement for communication with restorative dentists and other specialists
      5. Future: Efficient digital setups for indirect bonding
3. Finishing and retention in the 3D Digital Age
   1. Pre-debond scans for retainer construction
      1. Finishing aligners including digital workflow options for in-office implementation
   2. Elastics and other options in retention without returning to full appliances
   3. Material selection and trimming of aligners to vary stiffness
4. 3D printing
   1. Current uses available today
      1. In office aligners for tooth movement – digital work flow
      2. Models for in office appliance construction
      3. Analogs for tooth transplantation
   2. Future uses including metal printed appliances and direct printing of aligners
   3. Resin selection and safety recommendations for use and disposal.
   4. Implementation: Cost analysis and setting up office systems

Brief Bios of the Speakers:

**Matthew Larson DDS, MS – UNC Ortho 2012**

Dr. Matthew Larson has a private orthodontic practice with his wife, who is also an orthodontist, in Eau Claire, WI. Prior to his dental training, he completed an engineering degree at the University of Michigan.  He then received his DDS from the University of Minnesota and MS in orthodontics from the University of North Carolina. He is board certified by the American Board of Orthodontics. He currently serves on the AAO Committee on Technology and lectures at various orthodontic residency programs on practice management and biomaterials.

**Brent E. Larson DDS, MS – UNC Ortho 1987**

Brent Larson received his dental degree from the University of Minnesota, completed a general practice residency and practiced general dentistry for 3 years in the U.S Air Force. He then received his Orthodontic training at the University of North Carolina before joining the staff at the Mayo Clinic. At Mayo he served as Program Director in Orthodontics and received several “Teacher of the Year” awards. In 1996 Dr. Larson left Mayo for full-time private practice in Rochester, MN where he continues to practice 1 day a week. In 2004 he returned to full-time academics at the University of Minnesota where he currently serves as Professor and Director of the Division of Orthodontics. He has published many scientific articles and recently collaborated with Dr. Proffit on the latest edition of the Contemporary Orthodontics textbook.

Dr. Larson has received the Distinguished Dental Alumnus Award and Century Club Professor of the Year from the University of Minnesota. He is also the 2018 recipient of the Jarabak Award given for significant contribution to orthodontic teaching and research.

Dr. Larson is active in organized orthodontic associations both locally and nationally. He is a Past-President of the Minnesota Association of Orthodontists, the Midwestern Society of Orthodontists (MSO) and served as the 2018-2019 President of the American Association of Orthodontists (AAO). He and his wife Cindy have 3 sons, 2 of which are orthodontists, and 5 energetic grandchildren.